

CLAIMS

1. A footwear item comprising:
a sole that includes a top layer attached to a bottom layer such that their edges are fused together, the top layer including a first honeycomb core having an exposed surface that includes contours configured to accommodate contours of a foot, the first honeycomb core including unsealed cells that have walls with perforations, the bottom layer including a second honeycomb core that includes sealed cells.
2. The item of claim 1, further comprising:
a middle layer that includes a third honeycomb core that includes sealed cells.
3. The item of claim 1, wherein the footwear item is a sandal.
4. The item of claim 1 wherein:
the first honeycomb core includes cells of a first size; and
the second honeycomb core includes cells of a second size that is larger than the first size.
5. The item of claim 4, wherein:
the cells of the first honeycomb core are approximately half an inch in diameter;
and
the cells of the second honeycomb core are approximately one quarter of an inch in diameter.
6. The item of claim 1, wherein:
the exposed surface of the bottom layer includes dimples.
7. The item of claim 1, wherein:
the exposed surface of the bottom layer is contoured to provide traction.
8. The item of claim 1, wherein:
the bottom layer includes a top and a bottom thermoplastic sheet.

9. A sandal having a sole that comprises:

a bottom layer that includes a first honeycomb core, a first thermoplastic sheet bonded to a top surface of the first honeycomb core, and a second thermoplastic sheet bonded to a bottom surface of the first honeycomb core, wherein cells of the first honeycomb core are sealed by the first and second thermoplastic sheets to trap fluid within each cell; and

a top layer that includes a second honeycomb core that includes an exposed surface that is contoured according to contours of a foot, the second honeycomb core includes cells that are not sealed and, furthermore, having walls with perforations such that fluids can be expelled from the cells when the sandal is subject to a compressive force applied at the exposed surface;

wherein the top and bottom layer are attached such that their edges are fused together.